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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,652	10/01/2003	Robert C. Chang	SANDP035	8971

10027 7590 05/24/2006

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EXAMINER
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PEERS, CHASE W

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/676,652

Applicant(s)

CHANG ET AL.

Examiner

Chase Peers

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The examiner acknowledges the applicant's submission of the amendment dated **4/10/2006**. At this point claims have been amended and claims have been cancelled. Thus, claims are pending in the instant application.

**1. REJECTIONS BASED ON PRIOR ART**

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 8, and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Wells (Pat No 5341339) and further in view of Miki et al. (Pat No 5113512).

Regarding claims 1, 8, and 13, Wells describes mapping a plurality of logical blocks to a physical block, providing contents associated with the first and second logical blocks to the physical block, which is normal for a flash storage system (column 3, lines 3-15), the blocks being associated with a non-volatile memory system, a flash storage system by definition is non-volatile, (column 1, lines 10-14) and providing contents associated with a first and second logical block (column 2, lines 47-61).

Wells does not disclose the at least one criterion comprising contents of the first logical block being associated with a number of groups of logical pages fewer than a first limit;

Miki et al. does describe the at least one criterion comprising contents of the first logical block being associated with a number of groups of logical pages fewer than a first limit (column 3, lines 11-18 and lines 51-58).

Wells and Miki et al. are analogous art because they are from the same field of endeavor, storage medium file systems. At the time of the invention it would have been obvious to a person of ordinary skill in the art to have the logical block be associated with a group of logical pages. The suggestion for doing so would have been to make an address translation table at a manageable size. Therefore, it would have been obvious to combine Wells and Miki et al. for the benefit of a manageable address translation table to obtain the invention as specified in claims 1, 8, and 13.

As to be expected, the other rejections include Miki et al. when regarding this feature and they will not be included in this action since they will not otherwise change.

## **2. ACKNOWLEDGMENT OF ISSUES RAISED BY THE APPLICANT**

### **Response to Amendment**

Applicant's arguments filed 4/10/2006 have been fully considered but they are not deemed to be persuasive and, as required by M.P.E.P. § 707.07(f), a response to these arguments appears below.

## **3. ARGUMENTS CONCERNING PRIOR ART REJECTIONS**

### **1<sup>st</sup> POINT OF ARGUMENT:**

Regarding the argument that Wells does not state a logical block being associated with a number of groups of logical pages, the examiner agrees and a new rejection is found above.

## **4. CLOSING COMMENTS**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 2186

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### **Conclusion**

#### **9. STATUS OF CLAIMS IN THE APPLICATION**

The following is a summary of the treatment and status of all claims in the application as recommended by M.P.E.P. § 707.07(i):

##### **a(1) SUBJECT MATTER CONSIDERED ALLOWABLE**

No subject matter has been considered allowable.

##### **a(2) CLAIMS NO LONGER IN THE APPLICATION**

Claims 3 and 20-42 were cancelled by the amendment dated 4/10/2006.

##### **a(3) CLAIMS REJECTED IN THE APPLICATION**

Per the instant office action, claims 1,2, and 4-19 have received a second action on the merits and are subject of a final action.


For at least the above reasons it is the examiner's position that the applicant's claims are not in condition for allowance.

**10. DIRECTION OF ALL FUTURE REMARKS**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chase Peers whose telephone number is (571) 272-6757. The examiner can normally be reached on from Monday to Friday, 8AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
PIERRE BATAILLE  
PRIMARY EXAMINER  
5/9/02